## ABSTRACT OF THE DISCLOSURE

A method and apparatus are disclosed for generating routing information in a data communications network. A first network element (such as a router) receives information relating to a second network element, such as another node or a network link. In response, the first network element determines whether the information relating to the second network element indicates a change in the network. When information relating to a second network element indicates a change in the network, the first network element determines a new shortest path through the network from the first network element for each network element in the network. After a delay, the first network element updates routing information for the first network element based on the new shortest path for the first network element. Preferably the delay is proportional to the distance of the first network element from the second network element.